

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. CI-5714
FOR
VENTURA COUNTY WATERWORKS DISTRICT NO. 16 ("Discharger")
Piru Wastewater Treatment Facility
(File No. 08-164)

I. REPORTING REQUIREMENTS

- A. The Discharger shall implement this monitoring program on the effective date of this Order (WDR Order No. R4-2009-XXXX). The first monitoring report under this Program is due by April 15, 2010. Monitoring reports must be addressed to the Regional Board, Attention: Information Technology Unit. Monitoring reports shall be received by the Regional Board by the dates in the following schedule:

<u>Reporting Period</u>	<u>Report Due</u>
January - March	April 15
April - June	July 15
July - September	October 15
October - December	January 15

- B. By January 30th of each year, beginning January 30, 2011, the Discharger shall submit an annual summary report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous calendar year. In addition, the Discharger shall discuss the compliance record and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the waste discharge requirements.
- C. Laboratory analyses – all chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the California Department of Health Services Environmental Laboratory Accreditation Program (ELAP). A copy of the laboratory certification shall be provided each time a new and/or renewal is obtained from ELAP.
- D. The monitoring report shall specify the United States Environmental Protection Agency (USEPA) analytical method used, the Method Detection Limit (MDL) and the Minimum Level (ML) for each pollutant. For the purpose of reporting compliance with numerical limitations, and receiving water limitations, analytical data shall be reported by one of the following methods, as appropriate:
1. An actual numerical value for sample results greater than or equal to the ML;

December 22, 2008

2. "Detected, but Not Quantified (DNQ)" for sample results greater than or equal to the laboratory's MDL but less than the ML; or,
3. "Not Detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.

The minimum levels are those published by the State Water Resources Control Board in the *Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, February 24, 2005*.

- E. The MLs employed for effluent analyses shall be lower than the permit limits established for a given parameter, unless the Discharger can demonstrate that a particular ML is not attainable and obtains approval for a higher ML from the Executive Officer.
- F. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR Part 136.3. All Quality Assurance/Quality Control (QA/QC) samples must be run on the same dates when samples were actually analyzed. At least once a year, the Discharger shall maintain and update a list of the analytical methods employed for each test and the associated laboratory QA/QC procedures. The Discharger shall make available for inspection and/or submit the QA/QC documentation upon request by Regional Board staff.

Each monitoring report must affirm in writing that "All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health and in accordance with current USEPA guideline procedures or as specified in this Monitoring Program." Proper chain of custody procedures must be followed and a copy of the completed chain of custody form shall be submitted with the report.

- G. For every item where the requirements are not met, the Discharger shall submit a statement of the cause(s), and actions undertaken or proposed which will bring the discharge into full compliance with waste discharge requirements at the earliest possible time, including a timetable for implementation of those actions.
- H. The Discharger shall maintain all sampling and analytical results: date; exact place, and time of sampling; dates analyses were performed; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

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- I. In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with the requirements and, where applicable, shall include results of receiving water observations.
- J. The Discharger shall submit an annual summary report containing a discussion of the previous year's treated wastewater monitoring data, as well as graphical and tabular summaries of the data. The data shall be submitted to the Regional Board on a hard copy and on a 3 1/2" computer diskette or CD. The submitted data must be IBM compatible, preferably using Microsoft Excel spreadsheet software. The Regional Board may require the Discharger to submit the monitoring and annual summary reports electronically at some time in the future.

II. WATER QUALITY MONITORING REQUIREMENTS

- A. Influent Monitoring
 1. Influent monitoring is required to assess treatment plant performance and wastewater quality of discharge from the existing individual self-regenerating water softening facilities and community of Piru.
 2. Sampling stations shall be established at each point of inflow to the Piru wastewater treatment facility (PWTF) and shall be located upstream of any in-plant return flows and/or where representative samples of the influent can be obtained. The date and time of sampling shall be reported with the analytical results.
 3. Samples for influent BOD₅20°C and suspended solids analysis shall be obtained on the same day that the effluent BOD₅20°C and suspended solids samples are obtained in order to demonstrate percent removal. Similarly, sampling for other constituents shall also be coordinated with effluent sampling.
 4. The following shall constitute the influent monitoring program for the new PWTF:

<u>Constituent</u>	<u>Units¹</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u>
Total flow	gal/day	recorder	continuous
BOD ₅ (20°C)	mg/L	grab	quarterly
Suspended solids	mg/L	grab	quarterly
	T-3		

Chloride	mg/L	grab	monthly
Sulfate	mg/L	grab	quarterly
Boron	mg/L	grab	quarterly

¹ mg/L: milligram per liter

B. Effluent Monitoring

An effluent sampling station(s) shall be established for the new Plant at a location(s) where representative samples of treated wastewater can be obtained prior to discharge to the ponds. The sampling station may be located by the end of the pipe of the new Plant treatment system. Any proposed sampling station location for the new Plant shall be identified and approved by the Executive Officer prior to its use:

<u>Constituents</u>	<u>Units¹</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u>
Total waste flow ²	gal/day	recorder	continuous
pH	pH Units	grab	monthly
BOD ₅ (20°C)	mg/L	grab	monthly
Temperature	°F	grab	monthly
Suspended solids	mg/L	grab	monthly
Total dissolved solids	mg/L	grab	quarterly ³
Sulfate	mg/L	grab	quarterly ³
Chloride	mg/L	grab	monthly
Boron	mg/L	grab	quarterly ³
Nitrate nitrogen ⁴	mg/L	grab	quarterly ³
Nitrite nitrogen ⁴	mg/L	grab	quarterly ³
Ammonia nitrogen ⁴	mg/L	grab	quarterly ³
Organic nitrogen ⁴	mg/L	grab	quarterly ³
Oil and grease	mg/L	grab	quarterly ³
Total phosphorus	mg/L	grab	quarterly
Phosphorus	mg/L	grab	quarterly
MBAS and CTAS ⁵	mg/L	grab	quarterly
Hexavalent chromium	µg/L	grab	quarterly
Perchlorate	µg/L	grab	quarterly
NDMA ⁶	µg/L	grab	semi-annually ⁷
Pesticides ⁸	µg/L	grab	semi-annually ⁷
Inorganic chemicals (Attachment A-1)	mg/L	grab	semi-annually
Radioactive substance ⁹ (In Attachment A-2)	pCi/L	grab	annually

Organic chemicals

(in Attachment A-3) mg/L grab semi-annually

¹ mg/L: milligram per liter; µg/L: microgram per liter; °F: degree Fahrenheit; pci/L: picocuries per liter.

- ² The Discharger shall report the daily minimum, maximum and average value.
- ³ If the result of the quarterly analysis exceeds the limitations contained in Order No. R4-2009-XXXX, the frequency of analysis shall be increased to monthly within one week of knowledge of the test results, for at least three consecutive months, and until compliance with the limitations is demonstrated; after which the frequency shall revert to quarterly.
- ⁴ Samples of the nitrogen series (nitrate, nitrite, ammonia-N, and organic nitrogen) shall be collected at the same time the pH and temperature are recorded.
- ⁵ MBAS: Methylene blue active substances, CTAS: Cobalt thiocyanate active substances
- ⁶ NDMA: N-Nitrosodimethylamine
- ⁷ Semi-annual during the first year and thereafter annual monitoring
- ⁸ Refer to attached priority pollutants list - Attachment A
- ⁹ A complete list of radioactive substance (Attachment A-2) is attached, but the Discharger is required to test only for gross alpha and gross beta of the radioactive substance list.

C. Groundwater Monitoring

A groundwater monitoring program shall be implemented to evaluate impacts of wastewater discharged from the new Plant to the percolation/evaporation pond system. The Discharger must prepare a groundwater monitoring program to construct background water quality and fully assess any impacts from the historic surface discharge and future discharges to the percolation ponds and submit a groundwater monitoring plan to the Regional Board for review within 90 days from adoption of this Order. The groundwater-monitoring wells network for the new Plant is subject to approval by the Executive Officer prior to implementation, and shall include monitoring wells located upgradient, cross gradient, downgradient, and in close proximity to the ponds.

The following shall constitute the groundwater monitoring program for the new PWF:

<u>Constituent</u>	<u>Units</u> ¹⁰	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u> ¹¹
pH	pH units	grab	quarterly
Total coliform	MPN/100mL	grab	quarterly
Fecal coliform	MPN/100mL	grab	quarterly
Enterococcus	MPN/100mL	grab	quarterly

Ammonia-N	mg/L	grab	quarterly
Nitrate-N	mg/L	grab	quarterly
Nitrite-N	mg/L	grab	quarterly
Organic nitrogen	mg/L	grab	quarterly
Total dissolved solids	mg/L	grab	quarterly
Boron	mg/L	grab	quarterly
Chloride	mg/L	grab	quarterly
Sulfate	mg/L	grab	quarterly
Total phosphate	mg/L	grab	quarterly
BOD ₅	mg/L	grab	quarterly
Volatile organics ¹²	µg/L	grab	quarterly ¹³
Pesticides ¹²	µg/L	grab	quarterly ¹³
Metals ¹²	µg/L	grab	quarterly ¹³

^{10.} MPN/100mL: Most Probable Number per 100 milliliter; mg/L: milligram per liter; µg/L: microgram per liter.

^{11.} If any constituent exceeds the baseline water quality data, then the frequency of analyses shall increase to monthly until at least three test results have been obtained. After which, if no more constituents exceed the baseline, the frequency of analyses shall revert to quarterly.

^{12.} Refer to attached priority pollutants list - Attachment A.

^{13.} Quarterly monitoring during the first year, semi-annual during the second year, and thereafter annual monitoring

The groundwater monitoring reports shall include the following information:

1. Groundwater monitoring well identification number, date and time of sampling, and name of the individual collecting the sample;
2. Depth to groundwater measured to the nearest 0.01 foot, and groundwater elevation to the nearest 0.01 foot mean sea level;
3. Groundwater contour map depicting the hydraulic gradient and direction of groundwater flow across the plant;
4. Laboratory identification, date(s) of analysis, and analytical method used, and;
5. An evaluation of all groundwater monitoring data, together with recommendations of additional work, as needed.

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D. WATER SUPPLY MONITORING

If the results of the effluent monitoring exceed the water quality objective for following constituents, a water supply monitoring sampling station shall be established at a location(s) where representative samples of water supply can be obtained by the same date of sampling the effluent wastewater from the wastewater treatment plant. Water supply samples may be obtained at a single station, provided that station is representative of the water supply quality at the site. The following shall constitute the water supply monitoring program:

<u>Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u>
Total dissolved solids	mg/L	grab	quarterly
Sulfate	mg/L	grab	quarterly
Chloride	mg/L	grab	monthly
Boron	mg/L	grab	quarterly

The required water quality data can be substituted by the water quality supply data obtained during the same monitoring period by the local water supplier. If the water quality data is not possible to obtain, the Discharger shall collect samples and analyze them according to the above requirements.

III. WASTE HAULING REPORT

In the event that waste sludge or other wastes are hauled offsite, the name and address of the hauler shall be reported, along with types and quantities hauled during the reporting period and the location of the final point of disposal. In the event that no wastes are hauled during the reporting period, a statement to that effect shall be submitted in the quarterly monitoring report.

IV. OPERATION AND MAINTENANCE REPORT

The Discharger shall annually submit a technical report to the Executive Officer relative to the operation and maintenance program for the Piru Wastewater Treatment Plant including disposal area. The information to be contained in the report shall include, at a minimum, the following:

- a. The name and address of the person or company responsible for the operation and maintenance of the facility;

- b. Type of maintenance (preventive or corrective action performed);
- c. Frequency of maintenance, if preventive;
- d. Periodic pumping out of the secondary waste sludge; and
- e. Maintenance record of percolation ponds and waste sludge drying beds, including the results of at least monthly observations in the areas for any overflow.

In addition, the Discharger shall submit the results of annual inspections for the wastewater treatment and disposal systems. The inspection results shall be filed with the annual report due by January 30.

V. MONITORING FREQUENCIES

Monitoring frequencies may be adjusted to a less frequent basis or parameters adjusted by the Executive Officer if the Discharger makes a request and the request is supported by statistical trends of monitoring data submitted.

VI. CERTIFICATION STATEMENT

Each report shall contain the following completed declaration:

"I certify under penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

Executed on the ____ day of _____ at

_____(Signature)

_____(Title)"

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Ventura County Waterworks District No. 16
Piru Wastewater Treatment Facility
Monitoring and Reporting Program No. CI-5714

File No. 08-164

These records and reports will become public documents and shall be made available for inspection during business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region.

Ordered by : _____
Tracy J. Egoscue
Executive Officer

Date: February 5, 2009

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Attachment A-2

Table 4 – Radioactivity	
Constituent	Maximum Contamination Levels (pCi/L)
Combined Radium-226 and Radium-228	5
Gross Alpha Particle Activity (Including Radium-226 but Excluding Radon and Uranium)	15
Tritium	20000
Strontium-90	8
Gross Beta Particle Activity	50
Uranium	20

California Code of Regulation (CCR) Title 22, Section 64443

PRIORITY POLLUTANTS

Metals

Antimony
Arsenic
Beryllium
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Selenium
Silver
Thallium
Zinc

Miscellaneous

Cyanide
Asbestos (only if
specifically
required)

Pesticides & PCBs

Aldrin
Chlordane
Dieldrin
4,4'-DDT
4,4'-DDE
4,4'-DDD
Alpha-endosulfan
Beta-endosulfan
Endosulfan sulfate
Endrin
Endrin aldehyde
Heptachlor
Heptachlor epoxide
Alpha-BHC
Beta-BHC
Gamma-BHC
Delta-BHC
Toxaphene
PCB 1016
PCB 1221
PCB 1232
PCB 1242
PCB 1248
PCB 1254
PCB 1260

Base/Neutral Extractibles

Acenaphthene
Benzidine
1,2,4-trichlorobenzene
Hexachlorobenzene
Hexachloroethane
Bis(2-chloroethyl) ether
2-chloronaphthalene
1,2-dichlorobenzene
1,3-dichlorobenzene
1,4-dichlorobenzene
3,3'-dichlorobenzidine
2,4-dinitrotoluene
2,6-dinitrotoluene
1,2-diphenylhydrazine
Fluoranthene
4-chlorophenyl phenyl ether
4-bromophenyl phenyl ether
Bis(2-chloroisopropyl) ether
Bis(2-chloroethoxy) methane
Hexachlorobutadiene
Hexachlorocyclopentadiene
Isophorone
Naphthalene
Nitrobenzene
N-nitrosodimethylamine
N-nitrosodi-n-propylamine
N-nitrosodiphenylamine
Bis(2-ethylhexyl) phthalate
Butyl benzyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Diethyl phthalate
Dimethyl phthalate
Benzo(a) anthracene
Benzo(a) pyrene
Benzo(b) fluoranthene
Benzo(k) fluoranthene
Chrysene
Acenaphthylene
Anthracene
1,12-benzoperylene
Fluorene
Phenanthrene
1,2,5,6-dibenzanthracene
Indeno(1,2,3-cd) pyrene
Pyrene
TCDD

Acid Extractibles

2,4,6-trichlorophenol
P-chloro-m-cresol
2-chlorophenol
2,4-dichlorophenol
2,4-dimethylphenol
2-nitrophenol
4-nitrophenol
2,4-dinitrophenol
4,6-dinitro-o-cresol
Pentachlorophenol
Phenol

Volatile Organics

Acrolein
Acrylonitrile
Benzene
Carbon tetrachloride
Chlorobenzene
1,2-dichloroethane
1,1,1-trichloroethane
1,1-dichloroethane
1,1,2-trichloroethane
1,1,2,2-tetrachloroethane
Chloroethane
Chloroform
1,1-dichloroethylene
1,2-trans-dichloroethylene
1,2-dichloropropane
1,3-dichloropropylene
Ethylbenzene
Methylene chloride
Methyl chloride
Methyl bromide
Bromoform
Dichlorobromomethane
Chlorodibromomethane
Tetrachloroethylene
Toluene
Trichloroethylene
Vinyl chloride
2-chloroethyl vinyl ether
Xylene

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